

### Abstract

A portable apparatus for conveying blood flow parameters to a user, the apparatus comprising: a transducer device for providing for Doppler monitoring of flows within a patient; a processing unit interconnected to the transducer unit and adapted to extract a blood flow signal from the operation of the transducer and process the blood flow signal so as to produce a video blood flow signal and an audio blood flow signal; a display unit interconnect to the processing unit for visualising the video blood flow signal; and at least one audio emission devices interconnected to the processing unit for emission of the audio blood flow signal to the ears of the user.